

Patent claims

1. A card receiving device (1) for completely and automatically drawing a card (2) into the card receiving
5 device, having a clamping unit which fixes the card (2), having a gear mechanism which is kinetically connected to the clamping unit (3), having at least one drive which drives the gear mechanism and thus transports the clamping unit (3) into the card receiving device (1), characterized in that the card
10 receiving device (1) has a first gear mechanism (4) and a second gear mechanism (5) which are each at least temporarily driven by a drive, the gear mechanisms (4, 5) can be kinetically coupled to the clamping unit (3), the first gear mechanism (4) is kinetically coupled to the clamping unit (3)
15 in a first transportation phase, and the second gear mechanism (5) is kinetically coupled to the clamping unit (3) in a second transportation phase.

2. The card receiving device (1) as claimed in claim 1,
20 characterized in that the first gear mechanism (4) and the second gear mechanism (5) can be kinetically coupled to the clamping unit (3) as a function of the transportation phase.

3. The card receiving device (1) as claimed in claim 1,
25 characterized in that only one drive is provided to drive the first gear mechanism (4) and the second gear mechanism (5), the first gear mechanism (4) and the second gear mechanism (5) can be kinetically connected between the drive and the clamping unit (3), the first gear mechanism (4) is kinetically connected
30 between the drive and the clamping unit (3) in a first transportation phase, and the second gear mechanism (5) is kinetically connected between the drive and the clamping unit (3) in a second transportation phase.

4. The card receiving device (1) as claimed in claim 3, characterized in that the first gear mechanism (4) is disconnected from the transmission of power between the drive and the clamping unit (3) in a second transportation phase.

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5. The card receiving device (1) as claimed in claim 1, characterized in that the first gear mechanism (4) has a toothed rack (15) which is connected to the clamping unit (3), and a drive gearwheel (6) which is connected to the drive and engages with the toothed rack (15) in the first transportation phase.

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6. The card receiving device (1) as claimed in claim 1, characterized in that the second gear mechanism (4) has a slotted link-like first guide.

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7. The card receiving device (1) as claimed in claim 1, characterized in that the second gear mechanism (4) is kinetically coupled to a locking unit for locking a closure means of an input opening for the card (2) to be received, and the locking unit is controlled and driven by the second gear mechanism (4).

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8. The card receiving device (1) as claimed in claim 1, characterized in that the first gear mechanism (4) is formed such that it is disconnected before the card (2) reaches a read/write position, the second gear mechanism (4) has a first guide component (17) which can be rotated about a first axis of rotation (9) and has a slotted link-like first guide (12) which is formed such that it engages with a first guide element (34), which is connected to the clamping unit (3), when the first gear mechanism (4) disengages and the first guide (12) transports the clamping unit (3) into the read/write position.

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9. The card receiving device (1) as claimed in claims 5 and 8, characterized in that the first guide component (34) is arranged on a first axis of rotation together with the drive gearwheel (6).

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10. The card receiving device (1) as claimed in claim 1, characterized in that the card receiving device (1) has a first linear mount (13) which is used to linearly mount the clamping unit (3) in the inward direction (14).

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11. The card receiving device (1) as claimed in claim 1, characterized in that the first gear mechanism (4) has a linear tooth system (8) which is a constituent part of a toothed rack element (15), and an elastic element (16) is arranged between the toothed rack element (15) and the clamping unit (3), and the clamping unit (3) is thus resiliently mounted on the output drive of the first gear mechanism (4).

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12. The card receiving device (1) as claimed in claim 11, characterized in that the first guide element (34) is a fixed constituent part of the toothed rack element (15).

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13. The card receiving device (1) as claimed in claim 6, characterized in that a second guide component (17) having a second guide (18) is connected to the first guide component (11) such that it is fixed in terms of rotation, said second guide controlling and driving a locking unit.

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14. The card receiving device (1) as claimed in claim 13, characterized in that the locking unit has an actuating lever (23) which can be rotated about a second axis of rotation (20) and has a second guide element (42) which engages with the second guide (18).

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15. The card receiving device (1) as claimed in claim 6 and/or 13, characterized in that the first and/or the second guide (12, 18) are in the form of grooves or slots in the respective first and second guide components (11, 17).

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16. The card receiving device (1) as claimed in claim 13, characterized in that the second guide (12) has a branch (21) into a third guide (22) into which the second guide element (42) slides when or after the first guide element (34) engages
10 in the first guide (12).

17. The card receiving device (1) as claimed in claim 14, characterized in that the clamping unit (3) has a stop element (35) which strikes the actuating lever (23) when the clamping
15 unit (3) moves in the inward direction (14), so that the second guide element (42) moves into the third guide (22).

18. The card receiving device (1) as claimed in claim 13, characterized in that the second guide (18) has a circular
20 shape which is concentric with respect to the first axis of rotation (9).

19. The card receiving device (1) as claimed in claim 5, characterized in that the first guide (12) has two sections
25 (25, 26), a first section (25) and a second section (26), the second section (26) being in the form of a circle which is concentric with respect to the first axis of rotation (9).

20. The card receiving device (1) as claimed in claim 14,
30 characterized in that at least one sensor signals the position of the actuating lever (23) to a control unit.

21. The card receiving device (1) as claimed in claim 2, characterized in that the second gear mechanism (4) has at

least one third guide element (46) which controls and drives a locking unit for locking a closure means of an insertion opening.